UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,287	09/24/2003	Gary Karlin Michelson	101.0092-02000	6591

22882 7590 07/26/2011

MARTIN & FERRARO, LLP
1557 LAKE O'PINES STREET, NE
HARTVILLE, OH 44632

EXAMINER	
SNOW, BRUCE EDWARD	
ART UNIT	PAPER NUMBER
3738	
MAIL DATE	DELIVERY MODE
07/26/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GARY KARLIN MICHELSON

Appeal 2010-001641
Application 10/669,287
Technology Center 3700

Before: JENNIFER D. BAHR, CHARLES N. GREENHUT, and MICHAEL HOELTER, *Administrative Patent Judges*.

GREENHUT, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellant appeals under 35 U.S.C. § 134 from a rejection of claims 1-96. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

The claims are directed to an expandable push-in arcuate interbody spinal fusion implant with a tapered configuration during insertion. Claim 1, reproduced below, is illustrative of the claimed subject matter:

> 1. A push-in interbody spinal fusion implant for at least in part linear insertion across the surgically corrected height of a disc space between two adjacent vertebral bodies of a spine, said implant comprising:
>
> an upper member having a portion being at least in part arcuate adapted for placement toward and at least in part within one of the adjacent vertebral bodies, said upper member having at least one opening adapted to communicate with one of the adjacent vertebral bodies, said upper member having a proximal end and a distal end;
>
> a lower member having a portion being at least in part arcuate adapted for placement toward and at least in part within the other of the adjacent vertebral bodies, said lower member having at least one opening adapted to communicate with the other of the adjacent vertebral bodies, said openings of said upper and lower members being in communication with one another and adapted for permitting for the growth of bone from adjacent vertebral body to adjacent vertebral body through said implant and being sufficiently sized and located to allow for inter-body spinal fusion through said implant, said lower member having a proximal end and a distal end corresponding to said proximal end and said distal end of said upper member, respectively, and a length between said proximal and distal ends, said upper and lower members articulating therebetween adjacent one of said proximal ends and said distal ends of said upper and lower members and allowing

for expansion of the height of said implant, said upper and lower members having a first position relative to one another allowing for a collapsed implant height during insertion of said implant into the spine and a second position relative to one another allowing for an increased height, *said arcuate portions of said upper and lower members in the first position being angled to one another over a majority of the length of said implant and forming at least a portion of one of a frusto-conical shape and the shape of a cylinder split along a horizontal plane through its mid-longitudinal axis with said upper member and said lower member being angled to each other along the length of said implant*;

at least a portion of a bone-engaging projection is adapted for linear insertion formed on the exterior of each of said opposed arcuate portions of said upper and lower members for penetrably engaging the adjacent vertebral bodies and to facilitate securing said implant into the spine; and

at least one blocker adapted to cooperatively engage and hold at least a portion of said upper and lower members apart so as to maintain the increased height of said implant and resist the collapse of said implant to the collapsed implant height when said implant is in a final deployed position. (Emphasis added).

REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Ray	US 4,961,740	Oct. 9, 1990
Michelson	US 5,785,710	Jul. 28, 1998
Nolan	US 6,117,174	Sep. 12, 2000

REJECTIONS

Claims 1-96 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Claim 1-72,74-87 and 89-96 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nolan in view of Michelson .

Claims 73 and 88 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nolan, Michelson, and Ray.

OPINION

The Examiner's rejection of claims 1-96 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement is reversed.

Recognizing that new or amended claims which introduce elements or limitations which are not supported by the as-filed disclosure violate the written description requirement (*See, e.g., In re Lukach*, 442 F.2d 967 (CCPA 1971)) the Examiner rejected claims 1-96 under 35 U.S.C. § 112, first paragraph. The Examiner found that "[t]he specification fails to disclose an implant with upper and lower members having arcuate portions that in the first position are angled to one another over *a majority* of the length of the implant as recited in independent claim 1." Ans. 3. The Examiner contends that "Appellant's specification provides support for a 'substantial portion of the length' whereas claim 1 claims 'over a majority of the length' [thus] Appellant is arbitrarily defining a narrower range within a larger range which is new matter." Ans. 5; *See* Spec. 5:25-28. The Examiner additionally contends that "the supported range (substantial) does not include the new larger range (majority) which too is new matter." Ans. 5-6.

The latter of the Examiner's contentions is based on physical length, not the breadth of the claim terms. A "substantial portion of the length" may or may not be "a majority of the length" of the implant but a "majority of the length" of the implant will always be a substantial portion. Thus, the newly

inserted limitation narrows the scope of the claim. We recognize that, under certain circumstances, the description requirement of 35 USC §112, first paragraph may operate to defeat the patentability of a narrow but not a broader claim. *See In re Smith*, 458 F.2d 1389 (CCPA 1972).

Appellant's Specification need not describe the claimed invention in *ipsis verbis* to comply with the written description requirement. *In re Edwards*, 568 F.2d 1349 (CCPA 1978). "[T]he test for sufficiency [of the written description] is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (citations omitted). The inquiry is fact-specific, and the necessary level of detail of the disclosure will vary depending on the context. *Id.* This is not an instance where there is any unpredictability. *See, e.g., Id.* (*citing Capon v. Eshhar*, 418 F.3d 1349, 1359 (Fed. Cir. 2005). "A specification may, within the meaning of 35 U.S.C. § 112 ¶ 1, contain a written description of a broadly claimed invention without describing all species that claim encompasses." *Utter v. Hiraga*, 845 F. 2d 993, 998 (Fed. Cir. 1988).

In addition to an implant having angled portions angled to one another over a substantial portion of its length, the Specification also discloses that the implant itself, i.e., over its *entire* length, may "hav[e] a shape that is generally frusto-conical or generally that of a cylinder split along a horizontal plane through its mid-longitudinal axis wedging the upper half from the lower half by an inclined plane when inserted." Spec. 2:17-18; fig. 4; Reply Br. 2-3. This demonstrates that Appellant possessed an implant having a structure falling within the bounds defined by claim 1, that is, wherein "arcuate portions of said upper and lower members in the first

position [are] angled to one another over a majority of the length of said implant" as recited in claim 1. Thus, the Specification as originally filed provides descriptive support for the claimed subject matter

The Examiner's rejections of claim 1-72,74-87 and 89-96 as being unpatentable over Nolan and Michelson and of claims 73 and 88 as being unpatentable over Nolan, Michelson, and Ray are reversed.

The Examiner erred in rejecting claim 1 by finding that because the widths 26 and 28 in figure 3 of Nolan can be of different sizes, Nolan discloses a frusto-conical implant, that is, an implant having "arcuate portions of said upper and lower members in the first position being angled to one another over a majority of the length of said implant" as required by claim 1. Reply Br. 4-5.

The Examiner contends that "[o]ne having ordinary skill in the art would not interpret [the fact that widths 26 and 28 are not necessarily equal] to merely the extreme ends having a different width as stated by appellant, possibly implying a stepped configuration." Ans. 6. However, "a stepped configuration" is, in fact, a possibility and, apparently at least one of the embodiments contemplated by Nolan. *See e.g.,* Fig. 11, col. 5, ll. 12-14 (Legs 18', 20' diverging over only a portion of the implant). Thus, contrary to the Examiner's assertion, Nolan's implant is not necessarily frusto-conical. As Appellant points out, the Examiner has misinterpreted the term "substantially cylindrical profile" used by Nolan to mean something that it does not—frustoconical. Reply Br. 4. Nolan expressly defines "substantially cylindrical" as cylindrical except for flats 35. Reply Br. 4; Nolan col. 6, ll. 4-6.

We note that the figure 17 embodiment cited by the Examiner (Ans. 3), shows implant arms 18, 20 angled from a somewhat different position as compared to that same embodiment depicted in figure 12. *See* Nolan col. 3, ll. 54-56. "[I]t is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue." *Hockerson-Halberstadt, Inc. v. Avia Group Int'l*, 222 F.3d 951, 956 (Fed. Cir. 2000).

Although Nolan recognizes that prior art implants may have a frusto-conical shape (*see* Nolan, col. 1, ll. 36-38, describing "one-piece frusto-conical shaped implants"), the Examiner has not established that Nolan uses such a shape formed by arcuate portions angled to each other over a majority of the length of the implant as required by claim 1. Nor has the Examiner articulated any reason with a rational underpinning for modifying Nolan's implant to include such a feature. Neither Michelson nor Ray, as applied by the Examiner cures this deficiency. Accordingly, we are constrained to reverse the Examiner's rejection of independent claim 1 and those claims depending therefrom.

DECISION

The Examiner's rejection of claims 1-96 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement is reversed.

The Examiner's rejections of claim 1-72,74-87 and 89-96 as being unpatentable over Nolan and Michelson and of claims 73 and 88 as being unpatentable over Nolan, Michelson, and Ray are reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2009).

REVERSED

mls